

treatment for severe sialorrhea in subjects with PD. Serotype B produced larger effects, while as safe as serotype A.

<http://dx.doi.org/10.1016/j.rehab.2014.03.1215>

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Transdisciplinary program of physiotherapy- speech therapy-adapted physical education (APE) in the rehabilitation of Parkinsonian dysarthria

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Keywords: Parkinson; Dysarthria; Transdisciplinary rehabilitation

Background.– Parkinson's disease is characterized by motor disorders, impaired ambulation and grip. Dysarthria and hypophonia also disable patients, increasing social isolation. The combination of mechanisms such as poor voice intensity, posture and breathing difficulties, loss of endurance, makes rehabilitation complex.

Objectives.– To propose a multidisciplinary rehabilitative physiotherapy-speech therapy program and evaluate its evolution.

Methods.– The first program included 3 patients, allowing us to try a program of 8 weekly sessions of physiotherapy and orthophony for rehabilitation of dysarthria. Different units built the session: awareness, breathing, posture, voice. The second program was modified: five-patient group, 2 sessions per week, an expanded physiotherapy-orthophony program, introduction of adapted physical education (APE).

Results.– The second program proved its feasibility and brought functional benefits for patients, while increasing their enthusiasm.

Discussion.– APE complements physiotherapy and speech therapy. The program now offers earlier environmental objectives, with involvement of the environment and volunteers.

Further reading

Tomlinson CL, et al. Physiotherapy intervention in Parkinson's disease: systematic review and metaanalysis. *BMJ* 2012;345:e5004.

Keus SHJ, et al. Physical therapy in Parkinson's disease: evolution and future challenges. *Mov Disord* 2009;24:1–14.

<http://dx.doi.org/10.1016/j.rehab.2014.03.1216>

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Dispositional optimism and Parkinson's disease

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Keywords: Disability; Dispositional optimism; Parkinson's disease

Background.– Few articles deal with Dispositional Optimism (DO) in the field of Parkinson's disease (PD). Yet, personality traits may have a role when people cope with their illness.

Methods.– This cross-sectional study consisted of a regression analysis between a DO and health-related variables, such as depression, anxiety, quality of life and activities of daily living, in 70 PD patients. Means of log-linear regression were also used. Mean ratios adjusted for sex, age, education, and severity of disease were estimated.

Results.– DO is predictive of satisfactory QoL and low emotional distress at least in the early stages of PD.

Discussion.– A PD patient should not be viewed as a defective biomechanical device, but as a person who experiences illness, disability or restriction in social participation and actively strives for activities of daily living.

<http://dx.doi.org/10.1016/j.rehab.2014.03.1217>

Dispositional optimism improves outcome in Parkinson's disease rehabilitation

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Background.– The role of Dispositional Optimism (DO) in the field of Parkinson's disease (PD) rehabilitation has not been assessed.

Methods.– Fifty-eight PD patients completed the Revised Life Orientation Test (LOT-R) for Optimism, the WHO-5 scale for quality of life (QoL), the Hospital Anxiety and Depression Scale (HADS) test for emotional distress, and the Barthel scale for disability and were assessed using disease stage and severity measures (UPDRS). Correlations and multivariate regressions analyses compared Optimism with the health-related variables.

Results.– A higher level of DO at admission was associated with less severe disease, better QoL and lower emotional distress, but not with level of disability. The level of DO did not change after rehabilitation, while anxiety was significantly reduced especially in those with lower LOT-R and high HADS. The Barthel scale significantly improved independently from the level of DO.

Conclusion.– PD patients with higher DO generally had better QoL, clinical and psychological performances. Therefore, personality traits should be considered in PD because they can influence outcome. DO is predictive of Quality of life and anxiety levels both at admission and after 4 months at time of discharge. DO and Depression scores are unchanged by the rehabilitative intervention.

<http://dx.doi.org/10.1016/j.rehab.2014.03.1218>

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Rehabilitation program in order to prevent ambulatory activity decline in Parkinson's disease

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Keyword: Parkinson disease

Background.– Parkinson disease (PD) is a degenerative disorder of the central nervous system affecting movement which results in ambulatory decline. Ambulatory activity depends on the disease severity.

Objective.– This study investigated ambulatory changes after rehabilitation.

Methods.– Twenty-one patients with PD with similar clinical manifestations were assessed using the Unified Parkinson Disease Rating Scale, the 6-Minute Walk, and Maximal Gait Speed, before and after the same rehabilitation program.

Results.– All participants increased amount and intensity of daily ambulatory activity. Declines occurred in the individuals that stopped the program.

Conclusion.– Continuous rehabilitation program is beneficial to patients suffering from PD.

<http://dx.doi.org/10.1016/j.rehab.2014.03.1219>

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A review on tremor quantification methods–Toward rhythmicity measurements?

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Keywords: Tremor quantification methods; Rhythmicity; Diagnosis; Clinical categorization

Tremor is characterized by involuntary, oscillatory motions of a body part, due to reciprocal antagonistic muscle activations. The two main tremor types are rest